STUDIES OF NORTH AMERICAN AEGERIIDAE (Lepidoptera).

By George P. Engelhardt, Brooklyn Museum.

II.

DESCRIPTIONS OF TWO NEW WESTERN SPECIES.

Synanthedon albociliata n. sp.

Male: Antennae lacking, excepting small basal portions which are black. Palpi above black with tips entirely so; below snowy white, this color extending over the coxa and trochanter of the forelegs. Head black, hairy above intermixed with a few white hairs. Collar narrow, dull white. Thorax black with a lateral fringe of coarse, white hair above and of white scales below the base of wings. Abdomen black with a scattering of white scales on the fourth segment dorsally and with the fourth, fifth and sixth segments white ventrally. Anal tuft black above, mixed with sordid white below. Femora and tibiae of hindlegs densely clothed with coarse hair, black and sordid white intermixed; tarsi sordid white. Broad costa, outer and inner margins and large discal mark of forewings deep black, the clear spaces between the veins suffused with white reflections; cilia white. Hindwings transparent with faint reflections of white; veins and narrow margins black, cilia white; underside of forewings heavily shaded with white scales. Alar expanse, 18

Female: Antennae black with steel blue lustre. Thorax with two narrow, lateral stripes, yellowish white. Abdomen black with posterior half of fourth segment yellowish white. Anal tuft, ventral parts of abdomen and hindlegs all black. Forewings heavily shaded with black, streaked with white along the inner margins and before the discal mark. Cilia brownish black. Hindwings transparent between veins and broad margin which is black. Otherwise like the male. Alar expanse, 20 mm.

Habitat: Kerrville, Texas, October, 1916.

Foodplant and habits not known. Mr. H. Lacey, the collector, since removed from Texas, reported that the specimens were taken among some weeds on his ranch. This, together with the lateness of the season, indicates that the species is a rootborer in some perennial plant, possibly one of the Eupatorieae.

Type, male, allotype, female, and two paratypes, females, William Barnes Collection, two paratypes, females, G. P. Engelhardt Collection at the Brooklyn Museum.

Synanthedon auritincta n. sp.

Male: Antennae black with a small white area on upper surface near the tip. Palpi black above, pale yellow below, excepting the third joint which is black. Head black violaceous; front black with a triangular white patch above clypeus and the eyes broadly bordered with white below the antennae. Collar golden yellow above, white at the sides and below. Thorax above black violaceous with two broad lateral stripes and posterior margin golden yellow; below two broad yellow lateral stripes connecting with the stripes above anteriorly but not posteriorly, otherwise white. Coxa and trochanter of forelegs shiny white. Middle and hindlegs outward violaceous black with white annulations at the joints and spurs; inward dusted with white to tibial spurs; spurs white. Forewings transparent, costa, broad apical margin, large discal mark and veins black, slightly violaceous. Cilia dull black. Hindwings transparent, veins black, cilia dull black, gradually shading to white at the base. Under surface of wings same as above, except a yellow dusting on coxa and more slightly on apical margin and discal mark. Abdomen violaceous black with a narrow yellow band on segments 2, 3, 4, 6 and 7. Caudal tuft steel blue, narrowly fringed with white laterally; ventral parts of segments I and 2 dusted with white scales which form a narrow band on segments 4 and 5 and lateral spots on segment 7. Alar expanse, 14–15 mm.

Female: Antennae black, usually but not always marked with white near the tip. Palpi golden yellow above, pale yellow to whitish below. Head black violaceous; face black, bordered with white laterally and posteriorly. Collar golden yellow above, pale yellow or whitish below. Thorax black, heavily shaded with golden yellow laterally, anteriorly and posteriorly; ventral parts also heavily shaded with yellow of a paler hue, sometimes white. Coxa and trochanter of forelegs lustrous yellow or whitish, suggesting a bib. Middle and hindlegs golden yellow, except a violaceous annulation between the spurs of tibia and the tarsus which is violaceous and yellow banded at the joints. Forewings transparent; costa, apical margin, discal mark and veins black violaceous; the space between the veins from apical margin to about half

the distance to discal mark heavily shaded with golden yellow, discal mark narrowly bordered outwardly and base shaded prominently with the same color. Hindwings transparent, veins, margins and cilia black, excepting the basal part which is yellow. Underside of wings with the costa heavily shaded with yellow, otherwise as above. Abdomen violaceous black with narrow golden yellow annulations on all segments, excepting segments 5 and 7 which are all yellow. Ventral parts greatly suffused with yellow but less so on segments 2 and 3. Caudal tuft golden yellow intermixed with black laterally and at base above and below. Alar expanse, average 17 mm.; range, 12 to 21 mm.

Habitat: Baboquivari Mts., Pima Co., Arizona, August 1–15, 1923 and 1924. O. C. Poling, collector. Described from eleven specimens, two males and nine females, kindly submitted for determination by Dr. Barnes and Mr. Benjamin. The foodplant and habits are not known.

Type, female; allotype, male, and six paratypes, females, William Barnes Collection; one paratype, male and two paratypes, females, Geo. P. Engelhardt Collection at the Brooklyn Museum.

The assumption that here a dioecious species is being dealt with is directly supported only by the locality and date which correspond for all the specimens in hand. Nevertheless so many western species follow along the lines of sexual divergence as do the present examples that it seems preferable to err on the side of conservatism rather than to add to a nomenclature already overburdened with synonymy. The name "auritincta" has been suggested by the rich golden luster on the primaries and on the abdominal bands of the females, which should serve to separate readily this species from all others. The arrangement of the abdominal bands of the males also is distinctive, though less easily recognized, especially where specimens are rubbed or discolored.

(Pending the publication of this paper, word has been received from O. C. Poling, the collector, confirming the identity of the sexes of *auritincta* as set forth above.)

Note: Through an oversight, the manuscript for No. II, "Studies of North American Aegeriidae," has not been submitted to the Editor in the sequence which should have been followed and consequently it has been preceded by No. III, published in the Bulletin, vol. XX, No. 4.